Teachers' Guide

to

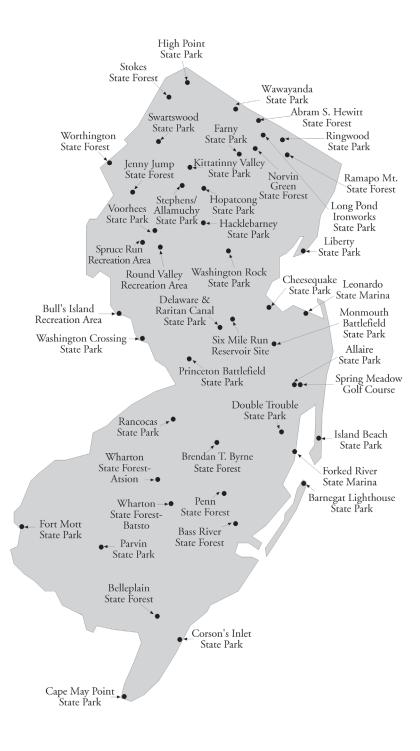
Education Programs

with

New Jersey State Parks, Forests, Recreation Areas, Historic Sites and the Forest Resource Education Center

2007 - 2008

New Jersey Department of Environmental Protection, Division of Parks and Forestry



An Invitation to Teachers

Leave the textbooks in the classroom and come on out to our state parks, forests and historic sites to experience the real thing! Drag a seine net in the Hudson River, Atlantic Ocean, or Barnegat Bay. See the New York Bay from New Jersey's highest lighthouse. Take part in a musket drill like a Revolutionary War soldier. Taste real NJ maple syrup. Explore New Jersey's unique places... There is no greater teacher than experience!

Many of NJ's parks, forests and historic sites offer education programs for school groups, scouts, homeschoolers and other organized groups. This booklet contains a synopsis of these programs at over 21 of our sites. Please contact the individual site for more information and to reserve your program.

Many programs are free (unless otherwise noted) and have been correlated with the New Jersey Core Curriculum Content Standards. Some sites offer outreach programs in the off-season to local schools.

Each site description has program information including the lesson title, grade level, length of time and a brief description of the program. Again, please contact the individual sites for further details.

Enjoy your day!

www.njparksandforests.org

Listed below is some additional information to help you plan your trip to a state park, forest, and/or historic site.

This brochure provides a synopsis of education opportunities at the sites. All of the sites have their own education program brochures that offer more specific information about that site's programs and procedures. Please contact the individual sites for more details, or check it out online at www.njparksandforests.org

PROGRAM FEE: Education programs are free, unless otherwise noted. (Generally, if Parks and Forestry staff teach the programs, they are free. At sites where a "Friends group" (non-profit group) offers the programs, there may be a charge.)

PARK ENTRY FEES: Park entry fees are not charged for groups coming to the park exclusively for education/interpretive programs. If after your scheduled program your group is intending to make use of other facilities such as swimming, mountain biking, trails etc, the park entry fee will be charged. Park entry fees vary. Please check with the individual sites.

PROGRAM RESERVATIONS: Pre-registration is required for all groups coming to participate in education/interpretive programs. Please contact the individual site to reserve your program. Programs are generally offered Wednesday – Friday, unless otherwise noted. Programs times are flexible, but are usually available between the hours of 9:30 a.m. and 3 p.m.

LUNCH FACILITIES: Lunch space availability varies from site to site.

SUPERVISION: For the safety of you and your students,

NJ Division of Parks and Forestry requires at least 1 adult for every 9 children under 18. If smaller ratios are required, it will be noted in the individual program.

NJ CORE CURRICULUM CONTENT STANDARDS: Some sites have correlated all of their programs to the NJCCCS with most of them correlated to the indicator level. Reports can be sent to you upon request. See individual site notes to determine if this is available at the site you wish to visit.

PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR TEACHERS: Several sites are registered with the Department of Education as Professional Development Providers and regularly offer workshops for educators. See individual site notes for more information.

Education Programs

Listed alphabetically by site

Please check the map inside the front cover to locate parks closest to you

Cheesequake State Park Interpretive Center 300 Gordon Road, Matawan, NJ 07747

Contact: Jim Faczak, Resource Interpretive Specialist (732) 566-3208

A complete brochure is available upon request.

FRESHWATER AND SALTWATER BIOMES - Grades: 1-High School (adapted to students' grade level). Duration: 1½ hours (flexible).

Learn about the ecology of freshwater and salt-water wetlands. Students will learn about the physical characteristics and ecological benefits of wetlands. Students will directly experience the wonders of the marshland through this lesson.

ANIMAL AND PLANT DIVERSITY - Grades: 1-High School (adapted to students' grade level). Duration: 1½ hours (flexible)

Cheesequake State Park boasts three distinct ecosystems; salt marsh, freshwater wetland and upland forest. Students will explore these ecosystems and examine how the plants and animals that live there are specially adapted to these environments.

NOTES:

- Programs are free. Park entry fees apply Memorial Day through Labor Day if group is utilizing other park facilities. Call site for details.
- Programs are generally offered Wednesday through Saturday during the school year.
- Programs are available between the hours of 9:30 a.m. and 3 p.m.
- Outdoor space for lunch is available depending on group size.
- Most programs have been correlated with the NJ Core Curriculum Content Standards.
- Environmental Education Outreach Programs are available on a limited basis. Call for more details.
- 1:9 ratio of adults to children under 18 is required as per the State Park Service Administrative Code 7:2-9.3

D & R Canal State Park 145 Mapleton Road Princeton, NJ 08540

Contact: D & R Canal State Park

(609) 924-5705

Vicki Chirco, Resource Interpretive Specialist/Historic Resources; dnrhistorian@verizon.net Stephanie Fox, Resource Interpretive Specialist/Natural Resources; dnrnaturalist@verizon.net

WHAT IS A CANAL? - THE CANAL ERA & THE DELAWARE AND RARITAN CANAL - Grades: 1-6. Duration: 1 hour

This program is an introduction to both the development and expansion of our country's transportation networks during the early 19th century and the story of the D & R Canal. Students will learn to interpret topographic maps and how the topography of land and location of industries effects the environment. A compass training session may be added with this program.

A BIRDS JOURNEY - Grades: 2-6. Duration: 1 hour

Students will experience a bird's migrational journey through NJ through an interactive game. (Adapted from NJ Audubon's: Bridges to the Natural World)

NJ's ANIMALS - Grades: 1-8. Duration: 1 to 1 ½ hours

Students will learn about the classification system of animals using pelts, feathers, skulls and taxidermy mounts of New Jersey animals. Natural history and adaptations of each animal will be discussed, as students get "hands-on" with the display.

THE CONNECTION BETWEEN CREATURES AND WATER - Grades: 5-12. Duration: 1 ½ to 2 hours

Students will learn to identify macro invertebrates found within our waterways and how to assess water quality with their findings. Depending on weather and water conditions, students will collect the macro invertebrates from the waterway.

INCREDIBLE INSECTS - Grades: K-6. Duration: 1 hour

Students will learn the many benefits of insects and how people need these creepy crawlies to survive. The older students will learn of the different types of metamorphosis and the younger students will transform a classmate into an insect. TREE-LICIOUS - Grades: 3-6. Duration: 1 hour

Students will learn how to age trees and all of the products we make from them. The students will work together and act out all the parts of the tree.

TREE ID - Grades: 4-8. Duration 1 ½ hours

Students will learn to use a dichotomous key to identify tree and shrub species. A tree scavenger hunt through the park will test the student's new skills.

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Tuesday through Friday; reservations required
- Programs are available between the hours of 10 a.m. and 2 p.m.
- Outdoor space for lunch is available, however please call for further details and instructions.
- History and Environmental Outreach Programs are available on a limited basis. Call for more details.
- Many programs have been correlated with the NJ Core Curriculum Content Standards.
- Some Pre- and Post- trip lesson plans are available.
- This facility is a DOE Registered Professional Development Provider. Please call for a listing of current teacher workshops.

Fort Mott State Park 454 Fort Mott Road Pennsville, NJ 08070

Contact: Andy Grant, Park Historian 856-339-9702 (Tel) 856-935-7818 (Fax) ftmottris@comcast.net (email) FORT MOTT, DEFENDER OF THE DELAWARE - Grades: K-12. Duration: 35 minutes

This basic tour is designed to introduce students to the history of Fort Mott and its role in the coastal defenses of the Delaware River.

FORT MOTT, BATTERY ROW - Grades: 9-12. Duration: 1 hour 30 minutes

This in-depth tour provides a complete tour of the gun batteries and visits areas normally not seen on the basic tour.

FIRE CONTROL TOWER - Grades: K-12. Duration: 15 minutes

Upon request, the 53 foot high fire control tower can be toured allowing students to see where the enemy ships would have been located on the Delaware River. This tour is limited to 10 students at one time.

FORT MOTT, TECHNOLOGY IN DEFENSE - Grades: 9-12. Duration: 1 hour

This tour highlights the technological advances in the construction and arming of Fort Mott and how it differed from all previous style fortifications built in the U.S.

DOWN JERSEY/NEW JERSEY COASTAL HERITAGE TRAIL – Grades: K-12. Duration: 15 minutes each

These two short films, available in the Welcome Center, highlight the National Park Service's New Jersey Coastal Heritage Trail.

FERRY SERVICE TO FORT DELAWARE – Grades: K-12. Duration: 3 hours. May to September

Seasonal ferry service is available from Fort Mott State Park to Fort Delaware on Pea Patch Island. For more information and reservations call 302-834-7941.

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Monday through Friday, please call for reservations.
- Programs are available between the hours of 9:30 a.m. and 3 p.m.
- Outdoor space for lunch is available.
- Pre- and Post- trip lesson plans are available, contact for availability.
- History Outreach Programs are available, call for more details.

Forest Resource Education Center Interpretive Center 370 East Veterans Highway, Jackson, NJ 08527

Contact: Terry O'Leary, Education Coordinator 732-928-0987, tmoleary@gmail.com

Web site: njforestrycenter.org

ABC ARBORETUM - Grades: Pre-K-3. Duration: 1-1 ½ hours

Using Project Learning Tree Activities, students explore colors and textures of leaves and bark, and observe shapes and patterns of leaves along an accessible path, visiting trees and shrubs with tactile sign markers for each letter of the alphabet.

FOREST PRODUCTS LOOP - Grades: Intermediate:

Duration: 2 hours

Students participate in hands-on activities that demonstrate uses for trees and shrubs encountered along the trail. The naturalist-led hike will include stops at the working Sawmill, the Sugar Shack, where maple syrup is produced, the Honey Bee station, Shiitake Mushroom kiosk, and 8 other traditional uses of forest products.

FIRE ECOLOGY - Grades: Intermediate-Secondary.

Duration: 1 1/2 hours

Participants will hike along the accessible Fire-Wise Trail, stopping at several locations to identify evidence of fire and observe fire management techniques including fire buffers, prescribed burning and fire breaks. A visit to the on-the-ground Fire Tower and the Pine Savanna are included.

BLUEBIRD NEST BOX TRAIL - Grades: Intermediate. Duration: 1 ½ - 2 hours

Students will learn about the fascinating world of the Eastern Bluebird through field investigations to examine the habitat, behavior, and nesting habits, visiting many of the 25 nest boxes and 4 winter roosting boxes strategically placed along the trail.

FOREST DISCOVERY TRAIL - Grades: 2-6. Duration: 1-1½ hours

Techniques of how to "See the forest for the trees" will highlight this hike along an accessible trail marked with tactile signs. Students will learn to identify characteristic native species, observing impacts of competition, lightning, wind, and human activities, and may visit the scenic overlook of the Toms River. PLANT-SOIL RELATIONSHIPS - Grades: Intermediate. Duration: 2 hours

Students will explore selected locations along the Project Learning Trail to examine various soil types, create a soil profile, and record soil data, including color, texture, pH, moisture, and permeability. Activities will include percolation tests, determining wetlands plants and soil types, measuring the water table, and discovering the benefits of riparian forest buffers.

WATERSHED INVESTIGATIONS - Grades: Intermediate. Duration: 1 ½ - 2 hours

Students will explore and measure an accessible, 100' measured segment of the headwaters of Toms River, calculating and recording average depths, widths and the velocity of the current. Using the collected data, participants will be able to calculate the carrying capacity of the stream in gallons per day.

WILDLIFE HABITATS - Grades: Intermediate. Duration: 1 ½ - 2 hours

A visit to the interactive Wildlife Habitat Learning Station within the Loblolly Pine grove will provide students, working in small groups, with the opportunity to identify various "signs of animals", to search in a variety of habitats to find these signs, and to observe forest management techniques used to improve wildlife habitats.

SENSORY AWARENESS TRAIL - Grades: Pre-K-6. Duration: 2 hours

Activities to promote use of the five senses will be provided along the accessible trail. By holding onto the "guide rope", students may feel the tactile interpretive

signs, and will visit two gathering areas with informational kiosks and solar powered "talking trees". A boardwalk leads through the hardwood swamp to a deck along the banks of the Toms River, where students can do creative writing or make an artistic impression of their experience.

SEEDS TO TREES NURSERY TOUR - Grades: K-6. Duration: 1-1 ½ hours

Explore the New Jersey State Forest Nursery, where students will learn how seeds are collected, sorted, processed and germinated to produce more than 300,000 seedlings that are shipped from here annually. A visit to the greenhouse, a hayride tour to the nursery fields and orchards, and an opportunity to plant acorns may be included if seasonal timing and weather conditions permit.

SWAMP LIFE - Grades: Intermediate/Secondary. Duration: 2 hours

The Swamp Life Trail provides access to forested wetlands near the headwaters of Toms River, Participants will visit the Swamp Life kiosk and "Talking Tree" and hike along the trail with stops at the White Cedar Restoration, Irrigation Pond, a vernal pool, a meandering stream and look for signs of wetlands wildlife along the banks of the river.

Additional Interpretive Learning Stations:

HANDS ACROSS NEW JERSEY RELIEF MAP WATERSHED FRIENDLY GARDEN BARNEGAT BAY WATERSHED MAP-DECK INDIAN OAK/ DENDROCHRONOLOGY CHANGING FOREST/ HOLMANSVILLE

PINELANDS FOOD WEB TREE FARMS IN NEW JERSEY

Special Events:

FALL FORESTRY FESTIVAL (first Saturday in October)
TRAIL EXPLORATION DAY (first Saturday in June)

NOTES:

- Programs are free.
- No entry fees.
- Programs are offered Monday through Friday.
- Programs are offered between the hours of 9:30 a.m. and 2 p.m.
- There are 7 miles of trails; the site is open dawn to dusk.
- A picnic area for lunch is available on site. Bring a trash bag, as we are carry-in/carry-out. Programs are held rain or shine, except in cases of extreme weather.
- All programs have been correlated with the NJ Core Curriculum Content Standards.
- Curriculum Guides are provided for educators, containing objectives, generalizations, pre and post trip activities, NJ Core Content Curriculum Standards and data collection pages. Suggested Project Learning Tree (PLT) related activities are included. This facility, through PLT, is a DOE Registered Professional Development Provider #64. Please call 732-833-9816 for a listing of current teacher workshops.

Grover Cleveland Birthplace, N.J. State Historic Site 207 Bloomfield Ave. Caldwell, N. J. 07006

Contact: Sharon Farrell Grover Cleveland Birthplace N. J. State Historic Site (973) 226-0001 GCMuseum@gmail.com

History Programs

NOW AND THEN: EARLY CHILDHOOD ACTIVITIES IN THE 1830s - Grades: Pre K-3. Duration: 30 minutes

1830s lifeways and activities for the very young.

GROVER CLEVELAND: NEW JERSEY'S PRESIDENT-Grades: 4 and up. Duration: 45 minutes

Students explore the life of Grover Cleveland through a tour the home and hands on activities.

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Wednesday through Sunday.
- Programs are available between the hours of 10 a.m. and 4 p.m and 1 p.m. and 4 p.m. on Sundays
- Space for lunch is available outdoor only.
- History Outreach Programs are available on a limited basis. Call for more details.

Hacklebarney State Park 119 Hacklebarney Rd, Long Valley, NJ 07853-9525

Contact: Superintendent of Voorhees State Park (908) 638-6969 voorheesstatepark@embarqmail.com

Types of Programs: Programs vary with the summer. Call for details.

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Wednesday through Sunday, Summer only (alter as appropriate).
- Programs are available between the hours of 10:30 a.m. and 5 p.m.
- Outdoor space for lunch is available.
- Environmental Education are available on a limited basis - summers only. Call for more details.

Hancock House Historic Site (Administered by Fort Mott State Park) P.O. Box 139 Hancock's Bridge, NJ 08038-0139 (856) 935-4373

Contact: Alicia M. Bjornson, Resource Interpretive Specialist

TOURS/SLIDE SHOWS

Site history, Salem County in the American Revolution, the Architecture, taverns, garden, environment (marsh/creek) and Swedish influence.

18TH CENTURY LIFE

Conducted on and off-site. Hands-on program which allows students to dress in period clothing. Tours are customized to meet the needs of the group.

CHILDREN'S WORKSHOPS

Learn about crafts & skills of the 18th century; herbs, butter, silhouettes, spinning & games. Scheduled in the summer months.

STORY TIMES

Program to utilize stories, such as the American Girl series, Nathan's Dark House & other 18th century stories to promote the Hancock House. Reservations required.

CONSTITUTION DAYS

Promotes the signing of the Constitution. Available during the month of September and early October. Each year a different aspect of how the constitution affects our lives is discussed.

CORNELIA HANCOCK

Celebrate the life of Cornelia Hancock, home of this Civil War heroine. Celebration takes place in May with exhibits on Cornelia, Civil War, medical supplies & firearms. High Point State Park High Point State Park Interpretive Center 1480 State Route 23, Sussex, NJ 07461

Contact: Kate Foord, 973-875-1471

Environmental Education Programs, some with a historic component

WINTER WALKS ON SNOWSHOES – Grades: PreK-8. Duration: 1-2.5 hours

Winter only. Snowshoes are a fun way to explore the wintery world. Come give them a try on a naturalist-guided tour through High Point's forests. If there is not enough snow, a hike can be substituted.

WILDLIFE IN WINTER - Grades: PreK-8. Duration: 45-90 minutes

Winter only. How do animals survive winter's cold? We'll talk about different coping strategies and then focus on the signs animals leave behind. You'll learn the basics of identifying animal tracks and, snow conditions permitting, we'll head outside to find some tracks.

WILDLIFE OF NORTHERN NJ – Grades: 3–6. Duration: 1.5-2 hours

Learn about the diverse species of wildlife that call New Jersey home, including how animals are adapted to their habitats and predator-prey relationships. We'll conclude with a short walk to search for signs of wildlife.

WILDLIFE GAMES – Grades: 2-5. Duration: 60-90 minutes

This is an energetic and light-hearted approach to the study of wildlife. Through role-playing games, students will learn about predator-prey relationships, population dynamics, and habitats. Minimum group size: 12. Maximum group size: 30.

SEEDS AND SQUIRRELS – Grades: PreK-2. Duration: 45-90 minutes.

Fall only. Even the youngest children know that squirrels are nuts about nuts! But squirrels don't just need the nuts, the nuts need the squirrels. Students will learn about squirrels and their role as tree planters, and will search for many different kinds of seeds, exploring how the seeds are dispersed.

GETTING READY FOR WINTER - Grades: PreK-2. Duration: 45–90 minutes - Fall only.

While we're busy putting on sweaters and looking for our snow shovels, animals are getting ready for winter too. Through stories and role-playing children will explore how different animals cope with the coming cold.

THE BEAR FACTS - Grades: K-Adult. Duration: 45–90 minutes

Once a rare sight, New Jersey's population of black bears is increasing and interactions between bears and humans are much more common. Students will learn the basics about bears—how they live and how to live with them. Beavers are one rodent you won't find in your attic, but there are plenty here at High Point. Students will learn about beavers and their adaptations to aquatic environments. We'll also take a walk to an area where beavers have been active.

INSECT LIVES - Grades: PreK-5. Duration: 45-90 minutes

We'll cover insect life cycles, basic anatomy and the roles insects play in the environment. We'll also use nets and hand lenses to capture insects and take a closer look.

COLD AND BUGGY-Grades: K-4. Duration: 60-90 minutes

Where do insects go in winter? Come find out. We'll discuss basic insect anatomy and life cycles and then we'll go for a walk to search for wintering insects and signs of insect activity. (Available November-March).

WONDERFUL WORMS - Grades: PreK-2. Duration: 45-75 minutes

Students will learn about basic worm anatomy and life cycles, and observe adult and hatchling worms as well as worm capsules. Students will also perform a few simple, hands-on experiments. You may opt to play a worm game and make a worm out of tube pasta and/or go outside on a "decomposer hunt" to search for worms and other critters at work in their natural habitat (the forest floor).

SENSES AND SIGNS OF THE SEASONS - Grades: PreK-2. Duration: 45-90 minutes

Every season has its own special sights, smells, sounds and textures. Students will review and exercise their senses while exploring what makes the season unique.

NATURE FROM A TO Z - Grades: K-2. Duration: 45-75 minutes

Children will review the alphabet and then take a walk to search for natural items that correspond to the letters of the alphabet ("A" is for acorn). Exploration and creativity are emphasized.

BIRDS OF A FEATHER - Grades: PreK-5. Duration: 45-90 minutes

Students will discover what characteristics birds share as well as the adaptations that differentiate them. Activities will vary somewhat by season, but may include learning bird songs, role-playing, studying nest construction, or learning how to use binoculars.

THE FORESTS AND THE TREES - Grades: 3-Adult. Duration: 1 .5-2 hours

What makes up a forest? Students will consider all the parts of a forest ecosystem and will take a walk to see a forest and how it works, seeking out specific components scavenger hunt-style. This program can also include a focus on tree identification and/or an emphasis on the life-cycle of trees.

TERRIFIC TREES - Grades: PreK-2. Duration: 45-90 minutes

Children will learn about the parts of a tree and how they grow through a series of activities that will vary by season, but may include making leaf or bark rubbings, acting out the life of a tree, and a sensory matching game.

TREES IN WINTER - Grades: 3-Adult. Duration: 1-2 hours

Winter only. Leaves are an easy way to identify trees, but they're not the only way! Come take a look at trees in winter. Learn how the parts of a tree function and how to identify trees using the distinct characteristics of each species.

POND OR STREAM STUDY - Grades: 3-Adult. Duration: 1.5-2 hours

Using nets, students will collect macroinvertebrates and other aquatic species from one of High Point's lakes or streams. Insect life cycles, adaptations and aquatic insects as indicators of water quality will be covered. Maximum group size: 20

VERNAL POND STUDY - Grades: 5-Adult. Duration: 1.5-2 hours

Spring only. Vernal ponds are unique, sensitive habitats. They serve as nurseries for several species of frog and salamander, and host other uncommon critters. Explore one of these temporary wetlands and learn about the animals that rely on them for their survival. Maximum group size: 15

Learn about fundamental human needs and how to satisfy them in a survival situation. We'll cover hiking basics—what to pack and wear and how to follow trails. Practical tips and creative thinking will be emphasized.

SURVIVAL 101 + HIKE

Survival 101 can be combined with any hike offered. The length of the program, as well as the difficulty and age level will depend on the hike you choose. (See Trail Hikes.)

SHELTER BUILDING - Grades: 4-Adult. Duration: 60 minutes

Learn how to build a sturdy, weather-proof shelter from available natural materials. This is an active and very hands-on program. Participants should come ready to participate and be prepared for the possibility of getting dirty and/or wet.

SURVIVAL 101 AND SHELTER BUILDING – Grades: 4–Adult. Duration: 2-2.5 hours.

BRRR! WINTER WEATHER - Grades: 3-6. Duration: 60–90 minutes

Winter only. The weather influences how we live our lives in winter. (Snow days!) Learn about water in all its frozen forms and how it affects wildlife. You'll also go on a winter-weather scavenger hunt, and you may choose to learn how to cut six-sided snowflakes.

MOUNTAINTOP TOUR: THE HIGH POINT OF NJ-Grades: 5-Adult. Duration: 45-90 minutes

What makes High Point special? Come find out. This tour can focus on the history or natural history of New Jersey's highest point (or both). From late spring through mid-fall it may be possible to include a visit inside the monument and a climb to the top.

MOUNTAINTOP SCAVENGER HUNT - Grades: 3-6. Duration: 45-90 minutes

Search for natural and historic facts and artifacts around the Monument and the top of the mountain while learning about the ecology and geology of the ridgetop as well as the history of the high point. From late spring through mid-fall it may be possible to include a visit inside the monument and a climb to the top.

TRAIL HIKES

A naturalist-guided hike on one of High Point's trails is a great way to explore the natural history of the Kittatinny Ridge. You may schedule a guided hike on any trail in the park. Listed below are some recommendations.

Easy – Easy walking for all ages. Moderate – Trails may have steep portions or rocky trail surfaces. Sturdy shoes are recommended. Difficult – Steeper and/or rockier than moderate. Hiking boots with ankle support are recommended.

CEDAR BOG HIKE

2.5 miles

Easy

The Atlantic white cedar bog is High Point's most unique habitat. What exactly is a bog and what plants and animals call it home? Come find out. Allow two hours. Self-guiding option.

GEOLOGY HIKE
1.5 to 3 miles Difficult

Hike a portion of the Appalachian Trail and learn about the geology of the Kittatinny Ridge. We can hike to an observation platform or to the Monument (.5 miles farther). For the return trip, you can walk back via park roads or your bus can meet your group at the Monument. Allow two hours if you plan to hike oneway, two and a half if you walk back. It may be possible to include a visit inside the Monument with this hike—please ask about availability when scheduling your program.

MONUMENT TRAIL HIKE
3.5 miles Moderate

Built by the Civilian Conservation Corps in the late 1930s, the Monument Trail circles the top of the ridge offering some of the best views at High Point, and opportunities to observe the unique ridgetop geology and vegetation. Allow three hours. It may be possible to include a visit inside the Monument with this hikeplease ask about availability when scheduling your program.

LAKE WALKS

Marcia 1 mile Easy to Moderate

Sawmill 1.5 miles Easy

Take a walk around Lake Marcia or Sawmill Lake. The Lake Marcia walk can include a focus on the Park's history, and Sawmill Lake, an emphasis on beavers. Allow one and a half hours.

NATURE WALK/SCAVENGER HUNT 1 mile Easy

Walking a short portion of one of High Point's longer trails, your students will learn about nature at High Point and complete a nature scavenger hunt. Most appropriate for third through 5s. Allow one hour.

STORIES OF STONE WALLS

Ayers Trail 1.25 miles Easy

Loop Hike 3 miles Easy to Moderate

Walk a portion of the Ayers Trail or make a longer loop combining the Ayers Trail and portions of the Mashipacong Trail, Sawmill and Ridge roads. Along the way explore the remnants of High Point's agricultural past. We'll look at fields and foundations, stone walls and hedgerows, and travel through forests that were once cow pastures. Allow one and a half to three and a half hours.

STEENYKILL LOOP HIKE

2 miles Moderate

Hike portions of the Monument and Steenykill Trails and an unmarked carriage road that serviced the High Point Inn in the late 1800s. You'll walk through typical ridgetop forests, as well as a richer stream ravine, and along a portion of Lake Steenykill. This hike can include an emphasis on High Point's recreational history. Allow two hours.

CROSS COUNTRY SKI TOURS

Naturalist-guided ski tours may be available if you wish to rent skis from the High Point Cross Country Ski Center. Please call the Interpretive Center at 973-875-1471 for more information.

NOTES:

- Programs are free
- Park entry fees may apply. Call site for details.
- Programs are generally offered Tuesday Sunday.
- Programs are generally available between the hours of 9:30 a.m. and 4 p.m.
- (Indoor/outdoor) space for lunch is available at nearby picnic areas.
- Environmental Education and History Outreach Programs are available on a limited basis. Call for more details.

Island Beach State Park
Island Beach State Park Nature Center, Forked River
Interpretive Center
PO Box 37
37 Shore Road
Seaside Park, NJ 08752

Contact: Diane Bennett-Chase Island Beach State Park Nature Center (732) 793-1698 ibspnature@netcarrier.com http://www.state.nj.us/dep/parksandforests/parks/island.html

Environmental Education Programs

NATURE CENTER TALK/BARRIER ISLAND TRANSECT WALK - Grades: K-College, Tailored to age. Duration: 1-2 hours

Designed to stimulate interest in nature. Students come to the nature center for a discussion about a barrier island ecosystem and a walk that explores the very unique plant communities that exist in the park. Depending on time limits and season, seining in the bay may be included in this program.

BEACH GRASS PLANTING PROGRAM - Grades: 4-College, Duration: 4 hours - March - May.

Students assist with the planting of American Beach Grass on the primary dunes through the park. Students learn the importance of the dune structure and of a barrier island.

SELF-GUIDED PROGRAMS - Grades: K-College, Duration: As necessary.

Educators are permitted to guide their own programs as per their requirements. Waders and seine nets are available for student use. Call for more information.

NOTES:

- Programs are free. Pre-registration is required.
 Forms are available on the Island Beach State Park
 Web site and may be faxed or emailed to the Nature Center.
- No park entry fees for educational tours.
- Programs are generally offered 7 days a week.

- Programs are available between the hours of 9 a.m. and 3 p.m.
- Outdoor space for lunch is available.
- Pre-trip lesson plans are available.

Kittatinny Valley State Park Visitor Center 157 Goodale Rd., Newton, NJ 07860

Contact: Lynn Groves Kittatinny Valley State Park (973) 786-6445 kittatinnyvalley@earthlink.net

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Tuesday through Saturday.
- Programs are available between the hours of 8 a.m. and 5 p.m.
- Outdoor space for lunch is available.
- Environmental Education Outreach Programs are available on a limited basis. Call for more details.

Environmental Education Programs

THE MAMMALS OF NEW JERSEY - Grades: 4-12. Duration: 1 hour

Students will get the rare opportunity to examine skulls, bones, pelts, teeth, tracks, and taxidermy specimens to learn all about the fascinating lives of New Jersey's mammals.

THE BLACK BEAR OF NEW JERSEY - Grades: 2-5.

Duration: 1 hour

A fun-filled hour of activities and a video will demonstrate the basic survival needs of black bears and how humans can peacefully coexist with them.

BACKYARD BIRDS - Grades: 3-5. Duration: 1 ½ hours

During an indoor slide-show and activities, including making a pinecone-and-peanut butter bird feeder, students will learn the basics of how to identify common birds, what interesting behavior to look for, and how to find birds on a short walk in the park.

BASIC ORIENTEERING - Grades: 4-8. Duration: 1 hour

Students will learn the parts of an orienteering compass, how to locate directions and read a topographical map, practice setting bearings, and use a compass as a navigational tool. This program requires a 1:2 ratio of adults to students.

CAT-TALES STORY HOUR - Grades: PreK-K. Duration: 1 hour

Children will participate in a show-and-tell session, followed by finger plays, stories, and a craft all relating to a unique aspect of nature.

ENDANGERED SPECIES OF NEW JERSEY - Grades: 5-12. Duration: 1 hour

During this indoor presentation, students learn about the imperiled plants and animals in our state, the causes for their decline, and what we can do to help prevent their extinction. ENJOYING THE OUTDOORS - Grades: K-3. Duration: 30 minutes

Children learn how to safely experience nature and enjoy outdoor activities through all four seasons. Hazards of the outdoors such as getting lost, poisonous species, insect bites/stings, and bear encounters are covered during this comprehensive program.

LOST IN THE WOODS - Grades: 1-4. Duration: 45 minutes

Children will learn the "Nine Rules for Survival" if they become separated from grown-ups and lose their way, and how to make an Emergency Survival Kit to bring with them when going on a hike.

THE MAGIC OF MONARCHS – Grades: 2-6. Duration: 1 ½ hours

Did you know that some butterflies migrate? Spend a year in the life of a monarch butterfly, from egg to caterpillar, to chrysalis, to adult. Find out why milkweed is so important to monarchs, as well as many other insects, while visiting our butterfly garden.

MYSTERIES OF MIGRATION – Grades: 3-5. Duration: 1 hour

Which animals migrate and why? What hazards do they face? Learn what it's like to be a bird on migration and take the adventure of a lifetime!

MEET THE TREES - Grades: 4-6. Duration: 1 hour

Students will learn how to identify trees by their leaves, bark, buds, seeds, and tree lore on this fun and exciting scavenger hunt. They will also learn how people

and wildlife use trees, and how they grow and reproduce.

NATURE WALK/SCAVENGER HUNT – Grades: 1-6.
Duration: 1 hour

An old-fashioned nature walk or scavenger hunt with the Naturalist to point out wildlife and interesting plants.

"MAGNIFY-CENT" MARSHES - Grades: 4-6. Duration: 1 hour

Utilizing collecting equipment, magnifying glasses, and identification charts, students will search for and identify aquatic critters, explore their life cycles and adaptations, and learn how what they find is an indication of water quality. Old sneakers or rubber boots are advised. This program is hands on!

THE NATURE OF VERNAL POOLS - Grades: 4-12. Duration: 1 ½ hours

Vernal pools provide habitat for many rare species, yet they too have become an "endangered species" with encroaching development. Students will visit a vernal pool to learn how we can help protect this unique and vital resource.

MOTHER NATURE'S MYTH VS. FACT - Grades: 4-6. Duration: 1 hour

Can porcupines shoot their quills? Do toads give us warts? Are there wolves in New Jersey? Our park naturalist will dispel these and other common myths to discover the truth about our local wildlife.

THE NATURE OF HALLOWEEN - Grades: 4-6. Duration: 1 ½ hours

Students will investigate the natural history of this magical season by learning about some misunderstood plants and animals. Afterwards, they'll scare up some fun on a "spooky" scavenger hunt outdoors!

OWLS: SILENT HUNTERS OF THE NIGHT - Grades: 4-12. Duration: 1 hour

During an indoor Power Point presentation of the owls of North America, students will learn about owl adaptations, vocalizations, and everything in between, then participate in an outdoor "owl-prowl."

Liberty State Park Interpretive Center 200 Morris Pesin Drive Jersey City, NJ 07305

Contact: Liberty State Park Interpretive Center (201) 915-3409 lspic@verizon.net

Environmental Education Programs

FIVE ALIVE! - Grades: PreK-3. Duration: 1 1/2 hours

Designed to enhance perceptual skills and increase sensory awareness of our surrounding environment. Students will take part in a guided exploration of their surroundings using all five senses: seeing, hearing, smelling, touching, and tasting.

Sometimes we don't see the amazing variety of life right beneath our feet! A story about some of nature's forgotten or misunderstood creatures will be followed by a mini safari and a closer look at some incredible beasties! (Program is dependent upon season)

SAVE A PLACE FOR WILDLIFE - Grades: PreK-6. Duration 1 1/2 - 2 hours

Please specify option A or B when registering. A program designed to enhance the understanding of "habitat" and the importance of having a suitable variety of habitats to sustain wildlife. Upland and lowland habitats of Liberty State Park will be explored. OPTION A*: Includes an interpretive walk and scavenger hunt on our beach habitat.

OPTION B: Includes an interpretive walk and scavenger hunt on our nature path.

Tree-mendous Trees! - Grades: PreK - Adult. Duration: 1 1/2 - 2 hours

Students will participate in a variety of fun, hands-on activities from the highly acclaimed curriculum guide; Project Learning Tree. Tree structure, growth patterns, survival needs & uses will be examined as well as their importance in human history and culture.

Raptor Rap - Grades: 3 - 8. Duration 1 1/2 - 2 hours

What magnificent birds of prey do we find in New Jersey? What special adaptations do they need to survive? Are they as big as you? Which ones visit us in Liberty State Park? All these questions and more will be answered in this fun, interactive study of these magnificent birds.

Explore the Nightlife - Grades: 3-8. Duration: 2 hours

Join us as we delve into the mysterious world of nocturnal animals. Through stories, crafts and hands-on activities we will gain a better understanding of what it takes to fill this nighttime niche.

Birds and Habitats - Grades: 3-Adult. Duration: Varies by program

A specialty program for students interested in bird life and birding in the park. This program may contain a pre-lesson where students will make their own "field guide". Upon completion of the guides, students will go out birdwatching and explore various habitats of the park in search of these elusive creatures.

Estuary Explorers* - Grades: 4-Adult. Duration: 2 hours

A hands-on exploration of the life in and around the Upper New York Bay. Older students may seine in the river for fish and shrimp, and/or comb the beaches for shells and other treasures. Wetlands values, biological and economic, will be discussed. (Program is seasonally dependent)

The Urban Estuary for Young Scientists* - Grades: 5-Adult, College. Duration: 21/2-3 hours

Similar to "Estuary Explorers" with water quality sampling experiments to test a variety of parameters, including pH, Salinity, and Dissolved Oxygen.
(Program is seasonally dependent)

NOTES:

- Programs are free.
- No park entry fees.

- Programs are generally offered Monday Friday
- Programs are available between the hours of 9:30 a.m. and 2 p.m.
- Programs are available to groups of ten or more.
- Maximum group size is dependant on staff availability.
- All programs must be reserved in advance.
- If our calendar permits, we will tentatively hold a date for you. We will forward a reservation form for you to complete and return. Your program will not be confirmed until we receive your completed reservation form. We will then send you a confirmation letter and directions.
- Indoor & outdoor space for lunch is available.
- All programs have been correlated with the NJ Core Curriculum Content Standards.
- Post-trip lesson plans are available.
- This facility is a DOE Registered Professional Development Provider. Please call for a listing of current teacher workshops.
- Environmental Education Outreach Programs are available on a limited basis. Call for more details.
- For programs marked *, your bus is required to stay with your group for the entire length of the program.
- Environmental education programs are taught wholly or partially outdoors regardless of weather. (Please have all participants come prepared!)
- Please indicate is any particular program requires a greater than 1:9 ratio of adults to students.
 (FYI - 1:9 ratio is required as per the State Park Service Administrative Code 7:2-9.3)

Long Pond Ironworks State Park Long Pond Ironworks Historic District C/o Ringwood State Park, 1304 Sloatsburg Road, Ringwood NJ 07456

Contact: Friends of Long Pond Ironworks 973-657-1688 Susan Shutte, Resource Interpretive Specialist 973-962-7031, RSPRIS@verizon.net

Long Pond Ironworks was founded in 1766 and operated continually until 1882, making iron for a wide range of purposes. Today, the ruins of three furnaces and other unique structures remain in a beautiful setting within Long Pond Ironworks State Park near the New York border in West Milford, New Jersey.

The Friends of Long Pond Ironworks, Inc. (FOLPI) is a nonprofit (501-c:3) volunteer organization dedicated to preserving, restoring and interpreting the remaining structures and the history behind them.

The 175-acre Long Pond Ironworks Historic District is an example of the ironworks plantations established in the American Colonies prior to independence. The village and furnaces at Long Pond produced iron for the Continental Army, for the American forces in the War of 1812, and for the Union Army during the Civil War. Long Pond Ironworks is listed on the State and National Registers of Historic Places and has been designated a National Historic Landmark.

The historical value of Long Pond Ironworks is paralleled only by its natural beauty. The forests that were once cut to make charcoal for the furnaces have returned, and the river that was once diverted into the hydropower systems again cascades over ancient rock

formations. The Friends of Long Pond Ironworks are working to ensure that the Historic District is preserved and remembered for its contributions to our past, present and future.

Please contact the Friends of Long Pond Ironworks for information on special tours or history outreach programs.

NOTES:

- Programs are free, donations accepted.
- No park entry fees.
- Programs are generally offered Monday through Friday.
- Programs are available between the hours of 9:30 a.m. and 3 p.m.
- Programs are outdoors, outdoor space for lunch is available.
- History Outreach Programs are available on a limited basis. Call for more details.

Monmouth Battlefield State Park Visitor Center 347 Freehold-Englishtown Road, Manalapan, NJ 07726-8815 Street Address: 114 Route 33, Manalapan, NJ 07726

Contact: Garry Stone, Historian: gwstone@dnetit.com, 732-780-5782

TIME TRAVEL TO THE 1780S WITH WILL MCDARMOTT - Grades: 3-6. Hike length: 1.1 miles. Duration: 1 ¼ hours

Veteran Will McDarmott leads militia recruits through the battlefield, showing them how terrain and obstacles were used during the 1778 battle. As he leads them through farm fields and orchards, they discuss the farming, fruit, and gardens. This hike is generally combined with a musket demonstration and a drill.

BATTLEFIELD HIKE - Grades: 8-12, college, & adult. Hike length: 2.5 miles. Duration: about 2 hours

After a brief introduction at the Visitor Center, the program bus takes participants to Tennent Church. Historian Stone then narrates the history of the battle as they hike back to the Visitor Center. May be combined with a written assignment.

MUSKET DEMONSTRATION - Grades: 3-12. Duration: 1/4 hour

Will McDarmott demonstrates the manual of arms. He then fires his musket as a participant reads the commands.

ARTILLERY DRILL - Grades: 3-adult. Duration: ½ hour

The battle of Monmouth was the largest field artillery engagement of the American Revolution. Participants learn the teamwork necessary to load, fire, and clean a replica 4-pounder gun several times a minute.

WOODEN MUSKET DRILL - Grades: 4-adult. Duration: 34 hour

Monmouth was the first battle after Von Steuben retrained the Continental Army at Valley Forge. Participants practice the manual of arms and attempt simple maneuvers.

NOTES:

Programs are free, and there is no park entry fee.

- Programs are generally offered Tuesday through Saturday by appointment.
- Programs are available between the hours of 9 a.m. and 3 p.m.
- Picnic tables are available.

Parvin State Park Classroom and Interpretive Pavilion 701 Almond Road, Pittsgrove, NJ 08315

Contact: Paul Taylor, Parvin State Park (856) 358-2369, parvris@hughes.net

Environmental Education Programs. A bit of history is included in some.

THE PARVIN SCENE - Grades: 4-adult. Duration: 35 minutes – Slide Program.

LINDSEY CHECKS OUT PARVIN - Grades: 2-Adult. Duration: 35-40 minutes with question/answer session, video.

Both of the above programs are introductory visuals about the park, providing basic information about facilities and activities available, plus some of the Flora and Fauna found at the park.

BIRDING WORKSHOP - Grades: 4-Adult. Duration: 2-8 hours depending on age level and coverage desired.

This is an introduction to birding with keys for identification, how to use field guides, binoculars, check lists, etc.

CLASSIFYING & IDENTIFYING - Grades: 4-Adult. Duration: 1.5 hours

This is a hands-on approach to develop one's ability to observe and group like with like, then identify living things.

DEE & DUM GROW UP - Grades: Pre-K to Adult. Duration: 20-25 minutes, slide program.

This program depicts the raising of two wild animals to get them off and going in the wild, pointing out that this is the exception to the rule, that wild animal parents can do it much better than humans.

Some 40 other programs are available covering seasons, different habitats, kinds of creatures, plants, etc.

- Programs are free.
- Park entry fees apply. Call site for details.
- Programs are generally offered Tuesday through Friday.
- Programs are available between the hours of 9:30 a.m. and 4 p.m.
- Space for lunch is available.
- Many programs have been correlated with the NJ Core Curriculum Content Standards.
- Some Pre- and Post- trip lesson plans are available.
- Environmental Education Outreach Programs are available within a 15 mile radius of the park. Call for more details.

Rockingham Historic Site PO Box 496 84 Laurel Avenue Kingston, NJ 08528

Contact: Rockingham Historic Site (609) 683-7132 Lisa A. Flick, Resource Interpretive Specialist/Historic Resources Rockingham1783@yahoo.com

LIST OF EDUCATION PROGRAMS

INTRODUCING GENERAL GEORGE WASHINGTON - Grades: 3-5. Duration: 40-60 minutes

Students explore the historic house where General Washington lived and worked at the end of the Revolutionary War period. Students learn how Washington used the rooms of the house and the significant events that happened while he was there.

LIFE IN AN EARLY AMERICAN HOUSE - Grades: 3-5. Duration: 40-60 minutes

Students learn about living and working in a house of the late 18th century and what life would have been like for a child of that time. Seasonally, weather permitting, a brief tour of the kitchen garden is included.

THE CHILDREN'S MUSEUM - Grades: 2-6. Duration: 30-45 minutes

Students experience life as a child in the 18th century by hands-on activities, such as trying on period clothing, playing games, trying out toys. Can be scheduled in conjunction with either of the two above programs.

NOTES:

- Programs are free, except outreach program, His tory to Go!
- No park entry fees.
- Programs are generally offered Wednesday through Friday by prearranged appointments only.
- Programs are available between the hours of 10 a.m. and 4 p.m.
- Outdoor space for lunch is available, however please call for further details and instructions.
- History Outreach Programs are available, including History to Go!, traveling baskets with period clothing, games, everyday items and activities, which can be used as pre- or post-visit material. Call for more details.

Spruce Run Recreation Area Nature Center 68 Van Syckels Rd., Clinton NJ 08809

Contact: Rebecca Williams-Ellis, Superintendent 908-638-8572 sprucerun@earthlink.net

LIST OF EDUCATION PROGRAMS

Programs vary with the summer. Call for details.

- Programs are free.
- Park entry fees apply. Call site for details.
- Programs are generally offered Wednesday through Sunday, Summer only.
- Programs are available between the hours of 10:30 a.m. and 5 p.m.
- Outdoor space for lunch is available.
- Environmental Education are available on a limited basis - summers only. Call for more details.

Stephens State Park 800 Willow Grove Street, Hackettstown, N.J. 07840

Contact: Helen Maurella, Park Superintendent Jim Newquist: Naturalist

Office: (908) 852-3790 Stephenssp@verizon.net Cell: (973) 202-4637 Papanuke@verizon.net

List of Environmental Education Programs

CRITTER CATCHING WITHIN THE MUSCONETCONG RIVER - Grades: 4-8. Duration: 4 hours; including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A1.A2, 5.1.4B.1.2, 5.5.2A1, 5.5.2A2, 5.4.4A1, 5.4.4A2, 5.7.4B, 5.8.4B.2, 5.10.2A.1, 5.10 4A1, 5.10.6A.1.

Resources: Access Nature: Pgs.97, 100, 106,112 Bridges To The Natural World: Pgs.31, 255.

Children will learn about the wildlife that lives in and near the Musconetcong River watershed. Children will complete water-monitoring activities through collecting aquatic invertebrates, classifying these organisms. and verifying their conclusions. Wear "wet-able" clothing.

PROSPECTING FOR GOLD - Grades: 4-6. Duration: 3 hours; including 30 minutes for lunch.

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A.1.4, 5.1.4A4, 5.1.8.A4, 5.1.8B1, 5.6.4A1, 5.8.4A1, 5.8.4B2, 5.8.6B2.

Resources: Access Nature: 89, 92, 97, 112, 194, Bridges. Pgs. 221, 225, 262, 228.

Relive the excitement of the California Gold Rush. Become a prospector and learn to pan for river stones and Pyrite in the Musconetcong River during our watershed-Simulation activities. Use a scale to measure "pennyweights", and take home a piece of pyrite. Wear "wet-able" clothing.

OWLS: NIGHTHUNTERS - Grades: 4-6. Duration: 3 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A1, 5.3.8D1, 5.10.2A1, 5.10.4A1,5.10.6A1, 5.10.6B1.

Resources: Access Nature: Pg.170 ,200, Bridges: Pgs. 20, 179, 183, 187, 210, 251.

Learn about owls as birds of prey. What are the physical adaptations that enables the Owl to be such an effective night hunter? Where is their link in the food chain. See what a Barn Owl ate through dissecting and classifying the contents of an owl pellet. Compare and contrast physical adaptations of Owls to other birds of prey.

TREE DETECTIVES - Grades: 4-6. Duration 4 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A1,5.1.4B1,5.5.2A2, 5.5.4A1, 5.5.4A2,5.5.4C1, 5.10.2A1,5.10.6B1, 5.10.8A1.

Resources: Access Nature: Pg. 126,154, 159, 166, 203 Bridges: Pgs.47, 59, 129,165, 200, 276.

Learn how to identify our trees through observing leaves and bark. Hike on the Highlands Trail to more

remote natural areas of our park. Learn about our native wildlife and their unique adaptations for survival and their uses of the trees from underground to the tree's canopy within our woodlands. Create a tree-cookie take-home craft as you learn about annual growth rings within a tree.

BIRDING FOR KIDS - Grades: 4-6. Duration 4 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.5.2A1, 5.5.4A1, 5.5.2B2, 5.5.8B1, 5.5.8B2, 5.5.8B3, 5.5.12.A4, 5.10.2A1, 5.10.6A1, 5.10.6B1.

Resources: Access Nature: Pgs. 68,146,159,166l 174, Bridges: Pgs. 47, 59, 179, 205, 210, 232, 267.

Learn how to observe and identify our resident and migratory birds that live within our wetlands and woodlands. Visit our bluebird box trail. Learn about the physical adaptations of "Birds of Prey" and our Bald Eagle. Bring your own binoculars.

BRING BLUEBIRDS TO YOUR SCHOOL (SPRING ONLY: March - May, 2008) - Grades: 4-6. Duration: 4 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A1, 5.5.2A1, 5.5.2C1, 5.5.4A1, 5.5.6C1, 5.10.2A, 5.10.6A1, 5.10.8A1.

Resources: Access Nature: Pgs. 34, 38, 57,174, 179, Bridges: Pgs. 20, 59, 129, 140, 143, 183, 205, 210, 232, 267.

Each participating elementary school will receive bluebird boxes to construct during their field trip and place on their school grounds.

Children will learn about the need for bluebird stewardship, through understanding the unique behaviors and needs of these migratory birds.

Students will be introduced to creating a bluebird box habitat and share this information with younger grade children within their school. Children will visit and observe the bluebird box trail within our park. Students will have the opportunity to share their observations with other school children in participating districts via the Internet as part of our out-reach bluebird project.

DAYTIME ASTRONOMY & SPACE SCIENCE: FOCUS ON OUR SUNS & STARS

Pg.3 - Grades: 4-6. Duration 4 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Science Content Standards:

5.1.4A1,5.1.4A.2, 5.1.12C1,5.9.2A1, 5.9.2A2,5.9.2B1, 5.9.4C1,5.9.6B1.

Resources: Summer institute 3: Solar System and Stars. Hands-On Astronomy for Grades: K-4. NJACE, Raritan Valley Community College, 2007.

Learn about our Sun's motion as you create pictures of the sun's shadows during the course of the day. Observe our sun through a sun-scope and observe solar flares on the sun's surface. Tell time through using the motion and position of three constellations. You will identify constellations using a star finder. Use your imagination to create constellations within your takehome Constellation Book. SPACE SCIENCE: SOLAR SYSTEM AND FOCUS ON OUR MOON - Grades: 4-6. Duration 4 hours including 30 minutes for lunch

Correlation's with N.J. Core Curriculum Science Content Standards:

5.9.2A1, 5.9.4A2, 5.9.4B1, 5.9.6A1.

Resources: (See # 7.)

Create a 3-D model of our earth and its moon to understand a sense of scale in our solar system. Students will predict phases and features of our moon through observing lunar photographs. Experiment with impact craters to determine how impactors affect the shape and depth of resulting craters.

ANIMAL HOMES WITHOUT OUR WETLANDS AND WOODLANDS - Grades: 4-6. Duration: 4 hours including 30 minutes for lunch

Correlation with N.J Core Curriculum Science Content Standards:

5.1.4A1, 5.1.4B1, 5.14B2, 5.5.2A1, 5.5.4A1, 5.5.4C1, 5.5.8B1,5.8.4B2,5.8.6B2,

5.10.2A, 51.6A1.

Resources: Access Nature: Pgs. 34, 38, 57, 61, 65,

68,154, 159, 166

Bridges: Pgs.47, 59, 129, 140,179, 210, 228, 253, 259,

285.

Many different native animals make Stephens State Park their home? Learn about the variety of animals including Bats, Black Bear, White-tailed deer, rodents, insects and wetland wildlife. Create a habitat web of connections among living and non-living things. Participate in a "critter-catching" hike during the spring and fall seasons. Understand how a watershed operates from creek to stream to river. Create a wild-life journal containing sketches of the habitat and animals that you have caught and released, or create a take-home collection of animal tracks. Wear "wet-able" clothing.

BE PROACTIVE: SURVIVAL IN OUR WOODLANDS - Grades: 4-6. Duration: 3 hours including 30 minutes for lunch

Correlation with N.J. Core Curriculum Content Standards:

5.1.4A1,5.1.4B2, 5.1.8A4, 5.1.8C1, 5.1.12A2, 5.2.8A3, 5.2.12B2.

Resources: Be Bear Aware Information Box from N.J.F & W. Lost in the Woods Program from SSP.

This program is a combination of "Lost In The Woods" and "Bear Aware". Would you know what to do if you were lost in the woods? Learn the important rules of survival and what to put into your take-home survival kit. Are you bear aware? Find out about the ecological and behavioral facts you should know about black bears.

- Programs are free.
- No park entry fees.
- Environmental Programs are offered on weekends.
 Programs are available between the hours of 10 a.m. and 3 p.m.

- Space for lunch is available outdoors at picnic tables.
- All programs are correlated with the N.J. Core Curriculum Science Content Standards.
- Pre and Post-trip lesson plans are available.
- No outreach programs are available.
- A 1:9 ratio of adults to students is required for field trips.

Steuben House Historic Site (administered by Ringwood State Park)

1209 Main Street, River Edge NJ, 07661

Contact: Steuben House, 201-487-1739

Built in 1752 by merchant Jan Zabriskie, the Steuben House witnessed the crossing of George Washington and the garrison of Fort Lee across the Hackensack River during their infamous November 1776 retreat. Because of this strategic position on the banks of the river at the New Bridge, the Steuben House survived throughout the American Revolution and was used by both Colonial and British soldiers.

The confiscated mansion once served as a military headquarters for General Washington and was later presented to Major General Baron von Steuben as thanks for his efforts during the War for Independence.

The Steuben House is listed on the New Jersey and National Registers of Historic Places.

Grounds tours are currently available as we restore the Steuben House. To schedule tours please call 201-487-1739.

NOTES:

- Programs are free.
- No park entry fees.
- Programs are generally offered Monday through Friday.
- Programs are available between the hours of 9:30 a.m. and 3 p.m.
- Programs are both indoor and outdoor, and outdoor space for lunch is available.
- There are no public restroom facilities on site.
- History Outreach Programs are available on a limited basis. Call for more details.

Twin Lights State Historic Site Lighthouse Road, Highlands, NJ 07732

Contact: Margaret Carlsen, RIS 2, Senior Historian 721-872-1814 Kathleen Dwyer, CSR, 732-872-1814

LIST OF EDUCATION PROGRAMS

HISTORY PROGRAM: $1\frac{1}{2}$ hour tour of the lighthouse and grounds. 15 minute slide presentation. All grades.

- Programs are free.
- No park entry fees.
- Call site for details in reference to parking.
- Programs are generally offered Wednesday through Friday.
- Programs are available between the hours of 10 a.m. and 3 p.m. No programs offered during the lunch hour - 12:00 to 1 pm.
- Space for lunch is available: Outdoor picnic grounds only.

- No indoor space is available.
- No programs have been correlated with the NJ Core Curriculum Content Standards.
- Pre- and Post- trip literature is available upon re quest.
- This facility is a DOE Registered Professional Development Provider. Please call for a listing of current teacher workshops. No programs are being offered at the present time.
- No History Outreach Programs are available. Literature about the site can be sent to the requesting institution.
- Programs attendees should adhere to the State Park service Code which is: 1:9 ratio.

Voorhees State Park 251 County Road 513, Glen Gardner, NJ 08826

Contact Information: Superintendent 908-638-6969 voorheesstatepark@earthlink.net

- Programs are free.
- No park entry fees.
- Programs are generally offered Wednesday Sunday, Summer only (alter as appropriate).
- Programs are available between the hours of 10:30 a.m. and 5 p.m. (alter as appropriate).
- Outdoor space for lunch is available.
- Environmental Education are available on a limited basis – summers only. Call for more details.
- Programs attendees should adhere to the State Park Service Code which is: 1:9 ratio

LIST OF EDUCATION PROGRAMS

Programs vary with the summer. Call for details.

Washington Crossing State Park Visitor Center Museum. 355 Washington Crossing-Pennington Rd, Titusville, NJ 08560-1517

Contact: Clay Craighead or Mark Sirak, Visitor Center Museum 609-737-9303, vcmwcsp@att.net.

LIST OF EDUCATION PROGRAMS

Revolutionary War History Programs.

VICTORY OR DEATH - THE REVOLUTION IS SAVED! - Grades: 4–12. Duration: 1 hour and 15 minutes

This program includes a brief discussion of the Christmas night crossing of the Delaware River, musket demonstration (weather dependent), video and museum tour. Program is generally offered Tuesday – Friday. Limited to 60 students.

MUSKETS, MARCHING AND BOATS - Grades 4-12. Duration: 2 hours and 15 minutes

This program includes Victory or Death Program and an additional walk to the river. This includes walking close to the footsteps of the Continental Army, climbing in a reproduction ferry boat, and re-enacting the Battle of Trenton. Water bottles are recommended for all students who participate in this program. Program not available in the event of inclement weather or insufficient staffing. Program is generally offered Wednesday through Friday. Limited to 2 groups of 60 students each (max 120).

NOTES:

- Programs are free.
- Park entry fees apply on weekends and Holidays only from Memorial Day Weekend through Labor Day weekend.
- Programs are available between the hours of 9:30 a.m. and 3 p.m.
- An outdoor space for lunch is available.
- History Outreach Programs are available on a limited basis. Call for more details.

Wharton State Forest Annie M. Carter Nature Center 4110 Nesco Rd. Batsto Hammonton, NJ 08037

Phone #: (609) 567-4559

LIST OF EDUCATION PROGRAMS

INTRODUCTION TO THE NEW JERSEY PINELANDS - Grades: 3-Adult. Duration: ½-1 hour

(Out-reach, On-site) A slide show or video accompanied by hands-on activities to provide an introductory look at the geology, ecology & economic importance of New Jersey's unique Pinelands. The Program emphasizes adaptations of plants and animals that help them survive and thrive in this environment. (If on-site the program can be combined with the Pinelands Nature Walk.)

NATURE CENTER SHOW AND TELL - Grades: K-4. Duration: ½-1 hour

(Out-reach, On-site) Visit the nature center at Batsto to

see, touch and learn about some of the animals and plants of the New Jersey Pinelands. Learn about carnivores and herbivores and the ways they live together in the pine forest and cedar swamps.

PINELANDS NATURE WALK - Grades: K-Adult.

Duration: ½ - 1 ½ hours

(On-site) Explore a trail that courses through several typical pineland habitats. Examine the geology, as well as the plant and animal life of the region. Search for animal tracks, see what's in bloom and enjoy the beauty that each season brings to the pinewoods and wetlands. (Can be combined with other programs.)

REPTILES OF THE NEW JERSEY PINELANDS - Grades: K-12. Duration: ½ - 1 hour

(Out-reach, On-site) From the eastern box turtle to the rare timber rattlesnake, New Jersey is home to a surprising diverse group of reptiles. A slide show or video and a collection of preserved and living specimens are used to interpret our varied reptile fauna. The object of this program is to foster an appreciation of these much maligned animals and illustrate the importance of habitat protection.

POND LIFE - Grades: 4-12. Duration: 34 - 1 1/2 hour

(On-site) Discover what animals and plants live within the amber colored waters of Batsto Lake. Observe and discuss the elements of a pond food web. Find out what makes Pinelands wetlands so special. Participants explore this freshwater environment with seine or dip nets, magnifying lenses and water testing equipment. (On-site) Participants enter a field habitat to see for themselves the great diversity of life, which exists there. The food pyramid of a field is emphasized with a look at its plentiful plant life, armies of herbivores and stealthy predators. An insect safari is a highlight of the program.

WHARTON'S WONDROUS WATERSHED - Grades: 5-Adult. Duration: ¾ - 1 ½ hour

(Out-reach, On-site) Did you know that Wharton State Forest contains about a third of the largest and one of the most pristine watersheds of New Jersey? Learn this and other watershed facts in this program regarding our most precious of resources.

- Programs are free.
- Park entry fee on weekends in summer. Call for details.
- Programs are generally offered Wednesday through Sunday (Tuesday – Saturday, Dec.-Mar.)
- Programs are available between the hours of 9:30
 a.m. to 4 p.m. by appointment.
- Nature Center hours are: 10 a.m. to 4 p.m.
 (12:30 p.m. to 4 p.m., Dec.- Mar.)
- Outdoor picnic facilities on site.
- Programs are correlated to the N.J. Core curriculum Standards.
- Some Pre- and Post- trip lesson plans are available.
- Project Learning Tree and Project Wild teacher work shops are available.
- On-site and out-reach Environmental Education Programs are available.

Wharton State Forest Batsto Village 4110 Nesco Road Hammonton, NJ 08037

Contact: Dan Campbell, RIS-HR batstomansion@yahoo.com, 609-561-7310

LIST OF EDUCATION PROGRAMS

Type of Programs:

Outreach to elementary schools program: lesson plan developed for teaching history of Batsto to elementary school children; guided tours of Batsto Village for elementary school children

Junior Historian Project: summer activity wherein participating children (6-12 years old) take part in guided tours of village; participants play games and make crafts associated with Batsto childhood in 19th century.

- Programs are free.
- Parking fees on weekends and holidays from Memorial Day to Labor Day.
- Programs available Tuesday-Sunday.
- Programs are available between the hours of 9 am to 4 pm.
- Space for lunch is available outside.
- Some programs may be correlated with NJ Core Curriculum Content Standards.
- Some pre-trip lesson plans may be available.
- History outreach programs are available.